

What is claimed is:

- 1 .     A combined member of aluminum-ceramics characterized by comprising a ceramic board, a conductive member holding electronic parts thereon, formed on one surface of the ceramic board, and a heat radiating member of aluminum or aluminum alloy bonded directly on the other surface of the ceramic board.
- 2 .     The combined member as claimed in claim 1, wherein the heat radiating member is larger in dimension than the ceramic board.
- 3 .     The combined member as claimed in claim 1, wherein the heat radiating member has an wall enclosing the ceramic board.
- 4 .     The combined member as claimed in claim 1, wherein the heat radiating member has a terminal base.
- 5 .     The combined member as claimed in claim 3, wherein the heat radiating member has a terminal base.
- 6 .     The combined member as claimed in claim 1, wherein the heat radiating member contains copper.
- 7 .     The combined member as claimed in claim 3, wherein the heat radiating member contains copper.
- 8 .     The combined member as claimed in claim 4, wherein the heat radiating member contains copper.
- 9 .     A combined member of aluminum-ceramics characterized by comprising a ceramic board, a conductive member holding electronic parts thereon, formed on one surface of the ceramic board, and a water cooling jacket of aluminum or aluminum alloy bonded

directly on the other surface of the ceramic board.

10. The combined member as claimed in claim 9, wherein the water cooling jacket contains copper.

11. The combined member as claimed in claim 1, wherein the direct bonding is carried out by a molten bonding method.

12. The combined member as claimed in claim 9, wherein the direct bonding is carried out by a molten bonding method.

13. The combined member as claimed in claim 1, wherein the main component of the ceramic board is one of alumina, aluminum nitride and silicon nitride.

14. The combined member as claimed in claim 9, wherein the main component of the ceramic board is one of alumina, aluminum nitride and silicon nitride.

15. A combined member of aluminum-ceramics characterized by comprising a plurality of ceramic boards, a conductive member holding electronic parts thereon, formed on one surface of each of the ceramic boards, and a heat radiating member of aluminum or aluminum alloy bonded directly on the other surface of each of the ceramic boards.

16. A combined member of aluminum-ceramics characterized by comprising a plurality of ceramic boards, a conductive member holding electronic parts thereon, formed on one surface of each of the ceramic boards, and a water cooling jacket of aluminum or aluminum alloy bonded directly on the other surface of each of the ceramic boards.

17. A power module characterized by comprising a combined member of aluminum-ceramics consisting of a ceramic board, a conductive member holding electronic parts thereon, formed on one surface of the ceramic board, and a heat radiating member of aluminum or aluminum alloy bonded directly on the other surface of the ceramic board.

18. A power module characterized by comprising a combined member of aluminum-ceramics consisting of a ceramic board, a conductive member holding electronic parts thereon, formed on one surface of the ceramic board and a water cooling jacket of aluminum or aluminum alloy bonded directly on the other surface of the ceramic board.

19. A power module characterized by comprising a combined member of aluminum-ceramics consisting of a plurality of ceramic boards, a conductive member holding electronic parts thereon, formed on one surface of each of the ceramic boards, and a heat radiating member of aluminum or aluminum alloy bonded directly on the other surface of each of the ceramic boards.

20. A power module characterized by comprising a combined member of aluminum-ceramics consisting of a plurality of ceramic boards, a conductive member holding electronic parts thereon, formed on one surface of each of the ceramic boards, and a water cooling jacket of aluminum or aluminum alloy bonded directly on the other surface of each of the ceramic boards.